

# Content Standards Informer

Curriculum and Instruction Unit



*July 2011*

## *Mathematics*

### **Proposed Montana Mathematics Standards**

The Montana Board of Public Education approved Superintendent Juneau's recommendation for adoption of the Common Core State Standards as the Montana Content Standards for Mathematics and English Language Arts and Literacy in history/Social Studies, Science, and Technical Subjects. Please take time to review the proposed 2011 Montana K-12 Content Standards for Mathematics:

[http://www.opi.mt.gov/pdf/Standards/11ContentStandards\\_Math.pdf](http://www.opi.mt.gov/pdf/Standards/11ContentStandards_Math.pdf). Please contact Jean Howard, [jhoward@mt.gov](mailto:jhoward@mt.gov), with questions about the new Montana Mathematics Standards.

### **Montana Content Standards Implementation Work Session**

Educators, teachers, administrators, leaders, professors, directors, and other math colleagues are invited to:

Montana Learning Center at Canyon Ferry Lake, Helena

August 8-10, 2011 (9:00 a.m. Monday through 3:00 p.m. Wednesday)

Lodging, meals, and \$125 stipend will be provided. Participants will also be reimbursed at the state rate for travel and meals not included with the Work session.

Goals of the Work session: Prepare a cadre of educators to:

1. facilitate awareness of the Proposed 2011 Montana Content Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects and Mathematics;
2. facilitate learning experiences for educators to build English, language arts, literacy, and mathematics standards and content knowledge;
3. present a process for district/schools to update Communication Arts and Mathematics curriculum and identify professional development needs; and
4. complete a Grade-Level Comparative Analysis for districts to use in updating their curriculum.

Please contact Jean Howard, [jhoward@mt.gov](mailto:jhoward@mt.gov), to sign up.

### **NCSM Members Only—It's a Good Idea**

The members-only section of the NCSM Web site will be ready late June!! Be sure to join or renew your membership to NCSM at [www.mathedleadership.org](http://www.mathedleadership.org) so that you can take advantage of this awesome and personal benefit. As an NCSM member, you will be able to access back issues of the NCSM journals and newsletters, position papers needed by mathematics leaders to influence school and district personnel, and NCSM products and resources.

## NCSM has a Leadership Corner

The leadership corner is a featured place in each issue to find motivational ideas for leaders of mathematics. This is an adaption of the Specialist/Coaches News Corner.

Do these attributes describe you, visionary, reliable, audacity, empowering people, positive, and motivating? [What is Leadership?](#) First part of a series on leadership is on this Web site and describes these attributes and contains the following quotes.

***"A leader is a dealer in hope" – Napoleon Bonaparte***

***"Delegating work works, provided the one delegating works, too." – Robert Half***

***"A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty." - Winston Churchill***

Jean Howard, Mathematics Curriculum Specialist  
[jhoward@mt.gov](mailto:jhoward@mt.gov)

## Communication Arts – English Language Arts

### Proposed Montana English Language Arts Standards

The Montana Board of Public Education approved Superintendent Juneau's recommendation for adoption of the Common Core State Standards as the Montana Content Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects and Mathematics. Please take time to review the proposed 2011 Montana K-12 Content Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects:

[http://www.opi.mt.gov/pdf/Standards/11ContentStandards\\_ELA.pdf](http://www.opi.mt.gov/pdf/Standards/11ContentStandards_ELA.pdf). Please contact Kris Goyins, [kgoyins@mt.gov](mailto:kgoyins@mt.gov), with questions about the new Montana English Language Arts Standards.

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Please contact Jean Howard, [jhoward@mt.gov](mailto:jhoward@mt.gov), to sign up.

## A Great Read!

Please investigate the excerpt from the book, *Literacy + Math = Creative Connections in the Elementary Classroom*, by Jennifer L. Altieri: [“Strengthening Writing Skills While Communicating Mathematical Knowledge” by Jennifer Altieri](#). The chapter “Strengthening Writing Skills While Communicating Mathematical Knowledge” provides excellent, practical ideas for improving your students’ writing skills within the Mathematics classroom.

## Indian Education for All Resources

If you haven’t visited the Office of Public Instruction’s Indian Education for All (IEFA) Curriculum Resources Web Page:

<http://www.opi.mt.gov/Programs/IndianEd/curricsearch.html>, please take some time this summer to do so. It provides links to IEFA lesson plans for all grade levels and subject areas.

## Visit a Museum Virtually

The Museum of Online Museums: <http://www.coudal.com/moom/> is a list of museums that offer online exhibitions. Some of the museums include virtual tours while others are photo galleries. Some of the museums include the Smithsonian, the Art Institute of Chicago, and the Metropolitan Museum of Art.

Kris Goyins, Communication Arts Curriculum Specialist  
[kgoyins@mt.gov](mailto:kgoyins@mt.gov)

## Early Grades

What's happening at the Museum of the Rockies?

### FROGS! A CHORUS OF COLORS

February 19<sup>th</sup> - September 5<sup>th</sup>, 2011

This incredible exhibit introduces visitors to the colorful and amazing world of FROGS. Get up-close and personal with some of the most visually stunning, vocally pleasing, and adaptive frogs on earth. In this highly interactive exhibit, visitors will learn about frog calls, habitats, and their unique life skills. Plus, see 15 species of live frogs from around the globe. This exhibit even comes with a zookeeper to care for and feed the frogs!

For more information, visit the Museum of the Rockies homepage at  
<http://www.museumoftherockies.org/Home/VISIT/tabid/53/Default.aspx>

Explore Montana's night sky through the Museum of the Rockies interactive tool:

<http://www.museumoftherockies.org/Home/LEARN/MORFun/InteractiveNightSky/tabid/112/Default.aspx>

### Professional Development:

2011 Montana Instructional Institute Early Childhood Strand  
August 1-3, 2011

Billings Hotel and Convention Center

- Registration cost: \$40
- Participants are responsible for their own travel and meal costs.
- Rooms are available at the Billings Hotel and Convention Center at a rate of \$77 per night.
- (406)-248-7151 or Reservations: 1-(800)-537-7286
- Register at: <https://toto.msu.montana.edu/cs/mii2011>

Summertime Reading Suggestion:

*The Power of Resilience: Achieving Balance, Confidence, and Personal Strength in Your Life*  
Robert Brooks, Ph.D., and Sam Goldstein, Ph.D

Terry Barclay, Early Grades Curriculum Specialist  
[tbarclay2@mt.gov](mailto:tbarclay2@mt.gov)

## *Library-Information Literacy*

Highlights from the 2010-2011 Newsletters

**Mission of the School Library Program:** To ensure that students are effective users and producers of information and ideas

[Montana Teacher-Librarian Wiki](#)

[NCCE Teacher-Librarian Summit 2011](#)

[Library of Congress – Teaching with Primary Sources](#)

For additional resources please follow me on Twitter: @cbartow or become my friend on Facebook: Colet Piquette Bartow

Colet Bartow, Library-Information Literacy Curriculum Specialist  
[cbartow@mt.gov](mailto:cbartow@mt.gov)

## *Science*

The Montana Mathematics and Science Partnership Projects have done some amazing things over the years in their efforts to collaborate between K-12 educators and institutes of higher education. We have begun to capture some of their great work on a Web site that will soon be linked to the OPI Web page. However, we would like for you to preview the page and give us some feedback first. Some of the individual projects have more on their pages than others so be sure to check them all out. Use the STEM login to download relevant documents you may be interested in viewing (**username:** MSP **password:** Math Science Fun). Both the username and password are case sensitive and the password includes spaces between each of the three words. Please provide feedback about the Web page by using the “Comments” section on the first page of the Web site. Because this link is not yet live you will need to enter the following URL into the address box of your browser:

<http://www.opi.mt.gov/curriculum/msp>

### **Greenhouse Gas Attack!**

Greenhouse Gas Attack is a new game on The Space Place that gives everyone a chance to slow down global warming—at least in the digital world. Brightly colored blocks represent greenhouse gases. They allow sunlight in, but do not allow heat out. You wield a bouncing greenhouse-gas-blasting ball to knock out some of the gas blocks so that some of the heat can escape. If you do a good job, Earth’s temperature stays in a healthy range. If you don’t get rid of enough greenhouse gas blocks, Earth gets too hot and you lose. Yellow “light balls” entering from the sky and red “heat balls” bouncing back from the ground demonstrate the greenhouse effect. This is one opportunity to get things under control! Check it out at <http://spaceplace.nasa.gov/greenhouse-gas-attack>.

Check out their other great sites for kids:

<http://climate.nasa.gov/kids>

<http://scijinks.gov>

<http://spaceplace.nasa.gov>

**Summer in Smaillywood** The Centre for Skills Development & Training (through funding from the Government of Canada's Office of Literacy & Essential Skills and in partnership with the Halton Industry Education Council) has developed an educational video game targeted at young adults (ages 15-30) to help enhance their employability. The game is focused on improving their competence in three of the Essential Skills: Oral Communication, Working with Others and Thinking Skills. These three skills were identified by employers as being the areas where young people need the most improvement.

The goal of the project is to provide young adults with practical hands-on learning to increase their skills, so the modules were developed with an eye to making the learning effective, accessible and fun. The result was **Summer in Smaillywood**.

Summer in Smaillywood is a series of three online games and wrap-around learning materials. The games have been designed for use in a variety of youth-focused settings, including classrooms, employment and literacy programs, youth drop-in centres and companies employing young people. Each module is designed to utilize the inherent learning properties of video games, which include a focus on problem solving, exploration and re-evaluating goals. The player is immersed in a game world where learning about Essential Skills is vital to their progression in the story. The humorous story line, unique characters and intuitive gameplay are features of Summer in Smaillywood that have appealed to players who have participated in the piloting phase. Try out this **free** resource and watch the video that promotes **Summer in Smaillywood**! Your students will love to experience this game!

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